STREAM ID S-Q12	STREAM NAME UNT to Kimballton Branch
LAT 37.375109 LONG -80.680822	DATE 06/17/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Stott, A.Grech, L. Sexton	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW <u>✓</u>

Perenniai 🗕	_ Intermitte	nt Epheme	eral TNW	RPW —	NRPW		
		T					
					Stream Erosion		
		Top of Bank Width: 4.0 ft			None Moderate	Heavy	
		Top of Ban	k Height:		Artificial, Modified or Char	nelized	
		LB 4.0	in RB 4.0 i	in	Yes _✓ No	iiieiizeu	
			th: 0.00 in	_			
CHANNEL FE	ATURES	1			Dam PresentYes _	<u>∕</u> No	
		Water Widt					
		High Water	Mark: <u>0.0 in</u>		Sinuosity <u>v</u> Low	Medium High	
		Flow Direct	tion: South		Gradient		
					Flat Moderate _		
					(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	sented by Stream	
			r, stream bed dry		Morphology Types Riffle % Run	%	
		Standing	bed moist		Pool %	70	
FLOW		— Standing	•		70		
CHARACTER	ISTICS		Water		Turbidity		
		Velocity			ClearSlightly turbidTurbid		
		Fast Moderate			OpaqueStained		
SlowOther							
INORGANIC SUBSTRATE COMPONENTS			_	RGANIC SUBSTRATE CON			
	(should	(should add up to 100%)			does not necessarily add u		
Substrate	Diame	eter	% Composition in	Substrate	Characteristic	% Composition in	
Туре			Sampling Reach	Туре	Sampling A	Sampling Area	
Bedrock				Detritus	sticks, wood, coarse	00	
Boulder		mm (10")	10		plant materials (CPOM)	30	
Cobble		ım (2.5"-10")		Muck-Mud	black, very fine organic		
Gravel	2-64 mm	า (0.1"-2.5")	10		(FPOM)		
Sand	0.06-2r	nm (gritty)	40				
Silt	0.004-	0.06 mm	30	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	10				
			ant Surrounding Lan		Indicate the dominant type		
		<u>✓</u> Forest			<u>✓</u> Trees Shrub		
			asture <u>v</u> Industrial		Grasses Herba	ceous	
WATERSHED		Agricult Other:	tural Resident	liai	Floodplain Width		
FEATURES		Other.				rate 15-30ft	
		Canopy Co	over		✓ Narrow <16ft		
		Partly o	penPartly sha	aded	Wetland Present Yes	√ No	
		<u></u> ✓ Shaded	Open		Wetland ID	<u>✓</u> No	
Indicate the dominant type and record the dominant species present			dominant species present				
AQUATIC VE	GETATION			Rooted subme		ing Free floating	
		Floating	g algae	Attached alga	e <u>—</u>		
_							
		Information	listed on this form re-	presents the c	lata collected in 2015. The st	ream was revisited	
		on 10/24/20	J19. The presence of	a stream char	nnel and OHWM was confirm	ed.	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/24/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE	
OBSERVED/OTHER OBSERVATIONS AND NOTES	

Stream ID S-Q12



Photograph Direction SSE

Date: 06/17/2015

Comments: 2015 stream identification.



Photograph Direction SW

Date: 10/24/2019

STREAM ID S-Q13	STREAM NAME Kimballton Branch
LAT 37.374335 LONG -80.681949	DATE 06/17/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Stott, A.Grech, L. Sexton	
FLOW REGIME Perennial ✓ Intermittent Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

i elelililai =	intermitte	пі— прпепі	ciai— IIVV —	101 VV —	14141 ***	
			leasurements k Width: 15.0 ft		Stream ErosionNone ✓ Moderate	Heavy
		Top of Ban	<u> </u>			
		LB_4.0	· ·	in	Artificial, Modified or Chan Yes ✓ No	inelized
CHANNEL FE	ATURES		th: 8.00 in	_	Dam PresentYes	<u>∕</u> No
			Mark: 2.0 ft		Sinuosity <u>v</u> Low	Medium High
		Flow Direct			Gradient	
					Flat Moderate _	Severe (10 ft/100 ft)
FLOW CHARACTER	ISTICS	Stream to Standing Flowing Velocity	r, stream bed dry bed moist g water		Proportion of Reach Representations of Reach R	%
INORGANIC SUBSTRATE COMPONENTS			_	ORGANIC SUBSTRATE COMPONENTS		
	(snould	add up to 100		(does not necessarily add up to 100%)		
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		mm (10")	20		plant materials (CPOM)	10
Cobble		m (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel Sand		1 (0.1"-2.5")	30		(I I OW)	
Silt		nm (gritty) 0.06 mm	30	Marl	grey, shell fragments	
Clay		mm (slick)		IVICIT	grey, shell flagificines	
WATERSHED FEATURES Predominant Surrounding Landuse Field/Pasture Industrial Agricultural Other: Floo Features Canopy Cover Partly open Shaded Open Wetl			Indicate the dominant type In	s		
AQUATIC VE	GETATION		emergent	d record the or Rooted submon Attached alga	_	ingFree floating
		Information	listed on this form ro	nracente the d	lata collected in 2015. The str	cam was revisited
					nnel and OHWM was confirm	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/25/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE	
OBSERVED/OTHER OBSERVATIONS AND NOTES	
NOTES	



Photograph Direction SE

Date: 06/17/2015

Comments: 2015 stream identification.



Photograph Direction ESE

Date: 10/25/2019

STREAM ID S-P6	STREAM NAME	UNT to Stony Creek
LAT 37.362146 LONG -80.688181	DATE 06/17/201	5
CLIENT MVP	CLIENT	MVP
INVESTIGATORS S. Ryan, B. Schrotenboer, D.). McCullough	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW	RPW NRPW_

Perenniai –	_ memilie	nt <u> </u>	erai <u>INW</u>	RPW —	NRPW <u> </u>	
		Estimate N	leasurements		Stream Erosion	
		Top of Bank	k Width: 6.0 ft		<u>✓</u> NoneModerate	Heavy
		Top of Bank	k Height:		Artificial, Modified or Chan	nelized
		LB 4.0	ft RB <u>4.0</u>	<u>ft</u>	Yes _ No	
CHANNEL FE	ATURES		h: <u>0.00 in</u>		Dam PresentYes	<u>∕</u> No
		Water Widt	Mark: 2.0 ft		Sinuosity 🗸 Low	Medium High
		ľ				
		Flow Direct	ion: Southwest		Gradient Flat <u>✓</u> Moderate _	Savere
						(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	sented by Stream
			r, stream bed dry		Morphology Types Riffle % Run	%
		Standing	oed moist g water		Pool %	70
FLOW CHARACTER	ISTICS	Flowing	•			
OHARAGIER	101100				Turbidity ClearSlightly to	turbidTurbid
		Velocity Fast	Moderate		Opaque Stained Other	
		Slow				
INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS					IPONENTS	
	(should	add up to 100	0%)	(does not necessarily add up to 100%)		
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	10	Detilitus	plant materials (CPOM)	100
Cobble	64-256 m	ım (2.5"-10")		Muck-Mud	black, very fine organic	
Gravel	2-64 mm	า (0.1"-2.5")			(FPOM)	
Sand		nm (gritty)	40			
Silt		0.06 mm	40	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	10			
		Predomina ✓ Forest	nnt Surrounding Lan Commer	i duse cial	Indicate the dominant type ✓ Trees Shrub:	
		Field/Pa			Grasses Herba	
MATEROUER		Agricult	ural Resident		Floodplain Width	
WATERSHED FEATURES		<u>✓</u> Other: ¡	Powerline corridor		Floodplain Width Wide > 30ft Moder	ate 15-30ft
		Canopy Co	over		✓ Narrow <16ft	
		Partly o		aded	Wetland PresentYes	√ No
ShadedOpe			Open		Wetland ID	<u>✓</u> No
ACHATIC VE	CETATION			d record the or Rooted submo	dominant species present ergent Rooted float	ing Free floating
AQUATIC VE	SEIATION	Floating	· —	Attached alga	<u> </u>	i iee iloatiilg
			<u> </u>	<u> </u>		
		Information	listed on this form re	presents the c	lata collected in 2015. The str	ream was revisited
		on 10/24/20	19. The presence of	a stream char	nnel and OHWM was confirm	ed.

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/24/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction NE

Date: 06/17/2015

Comments: 2015 stream identification.



Photograph Direction SW

Date: _____

STREAM ID	S-S5-Braid	d-2	STREAM NA	STREAM NAME Stony Creek			
CLIENT MVP			PROJECT NAME MVP				
LAT 37.360492 LONG -80.683979			9 DATE 04/09/	/2016	COUNTY Giles		
INVESTIGATORS J.Hart, A. Larson, T. Woods							
WATER TYPE	RPW [NRPW	FLOW REG Perennial	IME Intermit	ttent Ephemeral		
		Estimate Mea	asuraments		Sinuosity & Low M	Medium High	
CHANNEL FE	ATURES	Top of Bank H LB1.0 fl Water Depth: Water Width:_ Ordinary High	Vidth:6.0ft Height: t	ft	Gradient Flat Mo (2 ft/ Stream Erosion None Moderate Artificial, Modified or Chanre Yes No Within Roadside Ditch Yes No Culvert Present Yes Culvert Material:	100 ft) (10 ft/100 ft)Heavy nelized ✓ No	
FLOW CHARACTERISTICS Water Present No water, stream Stream bed mois Standing water Flowing water Velocity Fast Mod Slow			stream bed dry d moist vater		Culvert Size:in Proportion of Reach Repres Morphology Types (Only enter Riffle % Run Pool % Turbidity Clear Slightly to Other	r if water present) %	
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 100				ORGANIC SUBSTRATE COM (does not necessarily add up	-		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrate Type	e Characteristic	% Composition in Sampling Area	
Bedrock				Detritus	sticks, wood, coarse		
Boulder		56 mm (10")	20	20111100	plant materials (CPOM)	15	
Cobble		6 mm (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)		
Gravel		nm (0.1"-2.5")	15		(FFOIVI)		
Sand		-2mm (gritty)	10	Morl	grove shall fragments		
Silt Clay		04-0.06 mm 04 mm (slick)	15 20	Marl	grey, shell fragments		
WATERSHED FEATURES Predominant Surrounding Landuse ✓ Forest Commercial Field/Pasture Industrial Agricultural Residential ROWOther: Canopy Cover Open Partly shaded ✓ Shaded Predominant Surrounding Landuse Wide > 30ft Moderate 15-30ft Narrow <15ft Narrow <15ft Partly shaded							
		•					
MAC	ROINVER	TEBRATES/OT	HER WILDLIFE OBS	ERVED OR	OTHER NOTES AND OBSER	VATIONS	
Forks off of S-S5-Braid3 - 2016 comments Forks off of S-S5-Braid1 (formerly called S-S5-Braid3). Stream was visited on 3/5/2019 and 7/8/2020 and the presence of a stream channel and OHWM was confirmed.							

Stream Photograph Page

Stream ID <u>S-S5-Braid-2</u>



Photograph Direction WNW

Date: <u>04/09/2016</u>

Comments: 2016 stream identification.



Photograph Direction _____

Date: <u>07/08/2020</u>

Comments: 7/8/2020 visit

STREAM ID S-S5-Braid-1		STREAM NA	STREAM NAME Stony Creek			
CLIENT MVP		PROJECT N	PROJECT NAME MVP			
LAT 37.360306 LONG -80.683106			6 DATE 04/09/	/2016	COUNTY Giles	
INVESTIGATO	ORS J.Ha	rt, A. Larson, T. \	Voods			
WATER TYPE	RPW [NRPW .	FLOW REG Perennial	IME Intermit	tent Ephemeral	
		F-414- M			Olassa di La contra di La contr	Marathana I Bada
CHANNEL FE	ATURES	Top of Bank H LB <u>1.0</u> ft Water Depth: Water Width: Ordinary High	Vidth:	<u>4.0</u> ft	Gradient Flat ∠ Mo	nelized <u>~</u> No
					Culvert Size: in	
FLOW CHARACTERISTICS Water Present ✓ No water, stream be moist — Stream bed moist — Standing water — Flowing water Velocity — Fast — Model Slow			tream bed dry moist rater		Proportion of Reach Repres Morphology Types (Only enter Riffle % Run Pool % Turbidity Clear Slightly to Other	er if water present) %
INORGANIC SUBSTRATE COMPON (should add up to 100%)			-		ORGANIC SUBSTRATE COM (does not necessarily add u	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		56 mm (10")	20	20111100	plant materials (CPOM)	25
Cobble		mm (2.5"-10")	10	Muck-Mud	black, very fine organic	
Gravel		nm (0.1"-2.5")	20		(FPOM)	
Sand		-2mm (gritty)	10			
Silt	0.00	4-0.06 mm			grey, shell fragments	
(:lav	< 0.00		20	Marl	grey, snell fragments	
WATERSHED FEATURES		04 mm (slick)	20 Surrounding Landu Commercia ure Industrial Residential Other:	use al	Floodplain Width Wide > 30ft Narrow <15ft Modera	ate 15-30ft
WATERSHED		Predominant Forest Field/Pasti Agricultura ROW Canopy Cove Open	20 Surrounding Landu Commercia ure Industrial Residential Other:	use al	Floodplain Width Wide > 30ft	ate 15-30ft
WATERSHED FEATURES		Predominant Forest Field/Pasti Agricultura ROW Canopy Cove Open Shaded	20 Surrounding Landu	use al	Floodplain Width Wide > 30ft	

Stream Photograph Page

Stream ID S-S5-Braid-1



Photograph Direction SSW

Date: <u>04/09/2016</u>

Comments: 2016 stream identification



Photograph Direction _____

Date: 07/08/2020

Comments: 7/8/2020 visit

STREAM ID S-S05	STREAM NAME Stony Creek
LAT 37.360332 LONG -80.684029	DATE 06/17/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS J.Cook, N.Sovner, K.Lew	
FLOW REGIME Perennial — Intermittent Ephemeral —	WATER TYPE TNW — RPW ✓ NRPW —

			leasurements _		Stream Erosion	
		Top of Bank Width: 40.0 ft			<u>✓</u> NoneModerate	Heavy
		Top of Ban	· ·		Artificial, Modified or Char	nnelized
		LB <u>5.0</u>		<u>ft</u>	Yes No	
CHANNEL FE	ATURES	Water Dept	th: 3.00 ft		Dam PresentYes _	∠ No
		Water Widt	h: 30.0 ft			
		High Water	Mark: <u>2.0 ft</u>		Sinuosity Low	Medium High
		Flow Direct	tion: West		Gradient	
						Severe (10 ft/100 ft)
		Water Pres	sent r, stream bed dry		Proportion of Reach Repre	esented by Stream
		Stream b			Morphology Types Riffle 40 % Run 30	%
FLOW		Standing			Pool 30 %	
CHARACTER	ISTICS	<u>✓</u> Flowing	water		Turbidity	
		Velocity			Clear Slightly	turbidTurbid
			Moderate		OpaqueStained	
		Slow		Other		
INOR		STRATE CO		_	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)	
Substrate	<u> </u>		% Composition in	Substrate	1	% Composition in
Туре	Diame	eter	Sampling Reach	Туре	Characteristic	Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		mm (10")	25		plant materials (CPOM)	
Cobble		m (2.5"-10")	35	Muck-Mud	black, very fine organic (FPOM)	
Gravel Sand		1 (0.1"-2.5")	20		(I FOM)	
Silt		nm (gritty) 0.06 mm	20	Marl	grey, shell fragments	
Clay		mm (slick)		Wiaii	grey, shell fragments	
		` ,	ant Surrounding Lan	duse	Indicate the dominant type	(Check one)
		✓ Forest Commercial		cial	<u>✓</u> Trees Shrub	s ´
		— Field/Pa			Grasses Herba	ceous
WATERSHED)	_	Easement	iidi	Floodplain Width	
FEATURES	FEATURES				Wide > 30ft Model	rate 15-30ft
		Canopy Co		aded	_	
		Shaded	· — ·	-	Wetland PresentYes Wetland ID	<u>✓</u> No
					dominant species present	
AQUATIC VEGETATION				Rooted subme Attached alga		ingFree floating
				Allacited diga	<u> </u>	
			la a da la Sa Cilla di Cilla di	ata at a a dita a	ctivo channols Mannod a sir	anta busid

MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	Extensive floodplain filled with braided and inactive channels. Mapped a single braid, everything could be considered part of the feature. Multiple braids mapped in between 2015 comments Stream was revisited on 3/5/2019 and 7/8/2020 and the presence of a stream channel and OHWM was confirmed.
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Photograph Direction WNW

Date: 06/17/2015

Comments: 2015 stream identification.



Photograph Direction _____

Date: 07/08/2020

Comments: 7/8/2020 visit

STREAM ID S-G29	STREAM NAME UNT to Dry Branch
LAT 37.350691 LONG -80.658586	DATE 04/07/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Rodrian, Kelly, G.	
FLOW REGIME	WATER TYPE
Perennial Intermittent Ephemeral	TNW RPW NRPW

			leasurements k Width: 4.0 ft		Stream ErosionNoneModerate	Heavy
		Top of Banl	k Height:		Artificial, Modified or Chan	nolized
		LB 6.0	in RB <u>6.0</u>	<u>in</u>	Yes V No	inenzeu
CHANNEL FE	ATURES	Water Dept Water Widt	h: 1.00 in		Dam PresentYes	<u>∕</u> No
					Sinuosity <u>v</u> Low	Medium High
		Ŭ			<u> </u>	Triigii
		Flow Direct	ION: Lasi		Gradient Flat _✓ Moderate	Covere
						Severe (10 ft/100 ft)
FLOW CHARACTERISTICS		Stream by Standing Flowing Velocity	r, stream bed dry bed moist g water		Proportion of Reach Represented by Stream Morphology Types Riffle 80 % Run 15 % Pool 5 % Turbidity ✓ ClearSlightly turbidTurbid — OpaqueStained — Other	
INORGANIC SUBSTRATE CO			MPONENTS	0	RGANIC SUBSTRATE COM	IPONENTS
	(should	add up to 100	0%)	(does not necessarily add up	o to 100%)
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			0	Detritus	sticks, wood, coarse	
Boulder		mm (10")	50	20111100	plant materials (CPOM)	100
Cobble	64-256 m	m (2.5"-10")	15	Muck-Mud	black, very fine organic	0
Gravel		ı (0.1"-2.5")	15		(FPOM)	0
Sand		nm (gritty)	15			0
Silt		0.06 mm	0	Marl	grey, shell fragments	
Clay	< 0.004	mm (slick)	5			
WATERSHED FEATURES		Predominant Surrounding Landuse ✓ Forest Commercial — Field/Pasture Industrial — Agricultural Residential — Other: Canopy Cover — Partly open Partly shaded		cial l tial	Indicate the dominant type (Check one) Trees Shrubs Herbaceous Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <16ft	
		<u>✓</u> Shaded	Open		Wetland PresentYes Wetland ID	<u>✓</u> No
AQUATIC VEGETATION			emergent	d record the or Rooted submar Attached alga		ingFree floating
		Lafa mana Cana	Patadan dela famo		lata adlantadia 0045. The at-	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/27/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction NE

Date: 04/07/2015

Comments: 2015 stream identification.

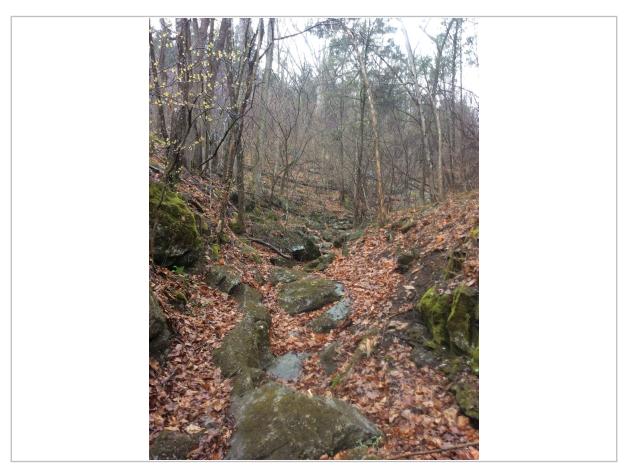


Photograph Direction NNW

Date: 10/27/2019

STREAM ID S-G30	STREAM NAME UNT to Dry Branch
LAT 37.350557 LONG -80.65816	DATE 04/07/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Rodrian, S. Kelly, G. Stev	vens
FLOW REGIME	WATER TYPE
Perennial Intermittent Ephemeral	TNW RPW NRPW

Perennial	<u> </u>	nt <u> </u>	eral TNW	RPW	NRPW		
	1		_				
		Estimate Measurements Top of Bank Width: 8.0 ft			Stream ErosionNone ✓ Moderate	Незуу	
		-			Nonev_woderate	rieavy	
		Top of Ban	· ·	. .	Artificial, Modified or Char	nnelized	
			ft RB <u>2.0</u>	<u>ft</u>	Yes No		
CHANNEL FE	ATURES	·	th: 0.50 in		Dam PresentYes _	✓ No	
			h: <u>1.0 ft</u>			_	
		High Water	Mark: <u>3.0 ft</u>		Sinuosity <u>v</u> Low	Medium High	
		Flow Direc	tion: SOUTH		Gradient		
					Flat	Severe (10 ft/100 ft)	
		Water Pres	sent		Proportion of Reach Repre	,	
			r, stream bed dry		Morphology Types	-	
			oed moist		Riffle 80 % Run 15	%	
FLOW		<u>✓</u> Standin			Pool 5 %		
CHARACTER	ISTICS	Flowing	water		Turbidity		
		Velocity			<u>✓</u> ClearSlightly		
			Moderate		OpaqueStainedOther		
		Slow					
INOR		STRATE CO add up to 10	MPONENTS 0%)	_	RGANIC SUBSTRATE COM does not necessarily add u		
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock			0	Detritus	sticks, wood, coarse		
Boulder		mm (10")	70	Delilius	plant materials (CPOM)	100	
Cobble	64-256 m	m (2.5"-10")	15	Muck-Mud	black, very fine organic	0	
Gravel	2-64 mm	(0.1"-2.5")	5	maon maa	(FPOM)	0	
Sand	0.06-2n	nm (gritty)	5			0	
Silt		0.06 mm	0	Marl	grey, shell fragments		
Clay	< 0.004 i	mm (slick)	5				
			ant Surrounding Lan		Indicate the dominant type (Check one) ✓ Trees Shrubs		
			Forest Commercial Industrial		Grasses Herba		
l		Agricul	tural Resident	tial	_		
WATERSHED FEATURES		Other: Canopy Cover Partly open Partly shad		Floodplain Width Wide > 30ft Moderate 15-30ft		rate 15-30ft	
					✓ Narrow <16ft		
				aded Watland Brazant Vac. (No.		4.81	
		<u>✓</u> Shaded Open			Wetland PresentYes Wetland ID	<u>✓</u> No	
		Indicate th	e dominant type and	d record the c	dominant species present		
AQUATIC VEGETATION		Indicate the dominant type and record the dominant species presentRooted emergentRooted submergentRooted floatingFree floating				tingFree floating	
		Floatin	g algae	Attached alga	е		
		_					
MACROINVERTEBRATES OR OTHER							
WILDLIFE OBSERVED/C	THER						
OBSERVATION NOTES							
NOTES							
		•					



Photograph Direction South

STREAM ID S-G32	STREAM NAME Dry Branch				
LAT 37.349047 LONG -80.652163	DATE 04/07/2015				
CLIENT MVP	PROJECT NAME MVP				
INVESTIGATORS A. Rodrian, s. Kelly, G. Stevens					
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW_				

		пс— приспи				
			leasurements k Width: 6.0 ft		Stream ErosionNone/ Moderate	Heavy
		Top of Bank Height: LB <u>2.0 ft</u> RB <u>2.0 in</u>			Artificial, Modified or Chan	inelized
CHANNEL FE	ATURES	Water Dept Water Widt	h: <u>0.50 in</u> h: <u>0.0 ft</u>		Dam Present Yes	<u> </u>
		High Water	Mark: <u>1.0 in</u>		Sinuosity 🔽 Low	Medium High
		Flow Direct	ion: SOUTHWEST		Gradient	
					<u>✓</u> FlatModerate (0.5/100 ft(2 ft/100 ft)	Severe (10 ft/100 ft)
			r, stream bed dry		Proportion of Reach Repre Morphology Types	•
		✓ Stream b			Riffle % Run Pool %	%
FLOW CHARACTER	ISTICS	Flowing	•		Turbidity	
		Velocity			Clear Slightly turbid Turbid Opaque Stained ✓ Other Dry channel	
		Fast Moderate Slow				
INORGANIC SUBSTRATE			MDONENTS	0	ORGANIC SUBSTRATE COMPONENTS	
114014		add up to 100		_	does not necessarily add up	
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			0	Detritus	sticks, wood, coarse	
Boulder		mm (10")	65		plant materials (CPOM)	25
Cobble Gravel		ım (2.5"-10")	<u>25</u> 5	Muck-Mud	black, very fine organic (FPOM)	0
Sand		n (0.1"-2.5") nm (gritty)	5		(FT OW)	
Silt		0.06 mm	0	Marl	grey, shell fragments	0
Clay		mm (slick)	0		3 1,7 1 13	
Clay	< 0.004	Predomina	nt Surrounding Lan		Indicate the dominant type	(Check one)
		Forest Field/Pa	Commer asture Industrial		Trees Shrub Grasses Herba	
MATERIALE D		Agricult Other:	ural Resident	tial	Eloodalain Width	
FEATURES	WATERSHED FEATURES				Floodplain Width Wide > 30ft Moderate 15-30ft	
		Canopy Co			✓ Narrow <16ft	
		Partly open Shaded Open		aded	Wetland PresentYes	<u>v</u> No
		Indicate th		d record the	Wetland ID dominant species present	
AQUATIC VE	GETATION				ergentRooted float	ingFree floating
		Floating	g algae	Attached alga	e	
	Information listed on this form represents the data collected in 2015. The stream was revisited					

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/27/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER	
OBSERVATIONS AND NOTES	

Stream ID S-G32



Photograph Direction NNE

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction NNE

Date: 10/27/2019

STREAM ID S-G33	STREAM NAME UNT to Dry Branch
LAT 37.348468 LONG -80.647413	DATE 04/07/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Rodrian, s. Kelly, G. Stev	ens
FLOW REGIME Perennial — Intermittent — Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

			leasurements k Width: <u>8.0</u> ft		Stream ErosionNone/ Moderate Heavy	
		Top of Ban	k Height:		Artificial, Modified or Char	nolizod
		LB 2.0	ft RB <u>2.0</u>	<u>ft</u>	Yes ✓ No	inenzea
CHANNEL FE	ATURES	Water Dept Water Widt	h: <u>3.00 in</u> h: 6.0 ft		Dam Present Yes	<u>∕</u> No
			Mark: 4.0 in		Sinuosity <u>v</u> Low	Medium High
		Flow Direct			Gradient	
					Flat Moderate _	Severe (10 ft/100 ft)
FLOW CHARACTERISTICS		Water Present No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow Proportion of Reach Represente Morphology Types Riffle 65 % Run 25 Pool 10 % Turbidity Clear Slightly turbid Opaque Stained Other		% turbidTurbid		
INORGANIC SUBSTRATE CO			MPONENTS	0	RGANIC SUBSTRATE CON	IPONENTS
		add up to 100		(does not necessarily add up to 100%)		
Substrate Type	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			5	Detritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	65	Detritus	plant materials (CPOM)	65
Cobble	64-256 m	ım (2.5"-10")	10	Muck-Mud	black, very fine organic	0
Gravel		า (0.1"-2.5")	10		(FPOM)	0
Sand		nm (gritty)	0			0
Silt		0.06 mm	0	Marl	grey, shell fragments	Ŭ
Clay	< 0.004	mm (slick)	10			
WATERSHED FEATURES		Forest Field/Pa Agricult Other:	Field/Pasture Industrial Agricultural Residential Other:		Indicate the dominant type Trees Shrub Grasses Herba Floodplain Width Wide > 30ft Narrow <16ft	s
		Canopy Cover Partly open Partly shaded V Shaded Open			Wetland PresentYes Wetland ID	<u>✓</u> No
AQUATIC VEGETATION		Rooted	emergent	d record the o Rooted subme Attached algae	_	ingFree floating
	Information listed on this form represents the data collected in 2015. The stream was revisited					

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/27/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction North

Date: 04/07/2015

Comments: 2015 stream identification.



Photograph Direction SSW

Date: 10/27/2019

STREAM ID S-G35	STREAM NAME UNT to Little Stony Creek
LAT 37.345175 LONG -80.633498	DATE 04/07/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS A. Rodrian, S. Kelly, G. Stev	vens
FLOW REGIME Perennial ✓ Intermittent — Ephemeral —	WATER TYPE TNW RPW_✓ NRPW

Perennial P	<u> </u>	nt Ephem	eral TNW	RPW <u>→</u>	NRPW	
Estimate Meas Top of Bank W Top of Bank He				Stream Erosion None Moderate	Незуу	
					NoneNoderate	rieavy
		·	ŭ		Artificial, Modified or Char	nnelized
				<u>in</u>	Yes No	
CHANNEL FE	ATURES	·	th: 8.00 in		Dam PresentYes _	✓ No
			th: 18.0 ft			_
		ŭ	Mark: <u>1.0 ft</u>		Sinuosity <u>v</u> Low	Medium High
		Flow Direct	tion: South		Gradient	_
					Flat	Severe (10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	,
			r, stream bed dry		Morphology Types	-
		Stream			Riffle 75 % Run 10	%
FLOW		Standing	•		Pool 15 %	
CHARACTER	ISTICS	<u>•</u> Howing	water		Turbidity	
		Velocity	Madazata		✓ Clear — Slightly — Opaque — Stained	
		<u>✓</u> Fast Slow	Moderate		Other	
INOR	GANIC SUR	_	MPONENTS	0	RGANIC SUBSTRATE CON	APONENTS
iii oi		add up to 10		_	does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			10	Detritus	sticks, wood, coarse	
Boulder		mm (10")	55	Delilius	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	10	Muck-Mud	black, very fine organic	0
Gravel	2-64 mm	(0.1"-2.5")	15	Widok Wida	(FPOM)	0
Sand	0.06-2n	nm (gritty)	m (gritty) 5			0
Silt		0.06 mm			grey, shell fragments	
Clay	< 0.004 i	mm (slick)	5			
		Predomina ✓ Forest	ant Surrounding Lan Commer		Indicate the dominant type Trees ✓ Shrub	
		Field/P			Grasses Herba	
		Agricul	tural Resident	tial	Floodplain Width	
WATERSHED FEATURES		Other:				rate 15-30ft
		Canopy Co	over		✓ Narrow <16ft	
		Partly openPartly shad		aded	Wetland Present Yes	✓ No
		Shaded	<u>✓</u> Open		Wetland ID	<u>v</u> No
				d record the o	dominant species present	
AQUATIC VE	GETATION		· —	Rooted subme	_	tingFree floating
		Floatin	g algae	Attached alga	<u>e</u>	
MACROINVER	RTEBRATES					
OR OTHER WILDLIFE						
OBSERVED/C						
OBSERVATION NOTES	NS AND					



Photograph Direction ENE

STREAM ID S-SS4	STREAM NAME UNT to Little Stoney Creek
LAT 37.34502817 LONG -80.63128744	DATE 09/12/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS L. Canty, E. Foster, A. Carra	ano
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW <u>✓</u>

Perenniai _	_ Intermitte	nt <u> </u>	eral TNW —	RPW —	NRPW <u> </u>		
Estimate Measurements					Stream Erosion	Hamin	
			k Width: 3 ft		NoneModerate	Heavy	
		Top of Bank	k Height:		Artificial, Modified or Chan	ınelized	
		LB <u>2.0</u>	ft RB <u>1.0 f</u>	<u>ft</u>	Yes _ <u>✔</u> No		
CHANNEL FE	ATURES	Water Dept	th: <u>0.00 in</u>		Dem Dresent Voc	4 No	
		Water Widt	h: <u>ft</u>		Dam PresentYes	NO	
		High Water	Mark:ft		Sinuosity 🔽 Low	Medium <u>v</u> High	
		Flow Direct	tion: South		Gradient		
					Flat Moderate _		
					(0.5/100 ft (2 ft/100 ft)	•	
		Water Pres			Proportion of Reach Repre Morphology Types	sented by Stream	
			r, stream bed dry bed moist		Riffle % Run	%	
EL 014/		Standing			Pool %		
FLOW CHARACTER	ISTICS	Flowing	water		Tunkidit.		
		Velocity	Volocity		Turbidity ClearSlightly turbidTurbid		
			Moderate		OpaqueStainedOther		
		Slow					
INORGANIC SUBSTRATE COMPONENTS ORGANIC SUBSTRATE COMPONENTS			IPONENTS				
	(should	add up to 100		((does not necessarily add up to 100%)		
Substrate	Diame	eter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Type Bedrock			Sampling Reach	туре	- Kalan and a same	Sampling Area	
Boulder	> 256	mm (10")	20	Detritus	sticks, wood, coarse plant materials (CPOM)	80	
Cobble		ım (2.5"-10")	25		black, very fine organic		
Gravel		n (0.1"-2.5")	25	Muck-Mud	(FPOM)		
Sand		nm (gritty)					
Silt	0.004-	0.06 mm	15	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)	15				
			ant Surrounding Lan		Indicate the dominant type		
		Forest Field/Pa	Commer asture Industrial		✓ Trees Shrub: Grasses Herba		
		Agricult			Grassesnerba	ceous	
WATERSHED		Other:			Floodplain Width	45 005	
Canopy Cover				Wide > 30ft Moder ✓ Narrow <16ft	rate 15-30ft		
		Canopy Co	over openPartly sha	haha	- Nanow Toll		
		Shaded		aucu	Wetland PresentYes	<u>✓</u> No	
		_			Wetland ID		
AQUATIC VE	SETATION			Rooted subm	dominant species present ergent Rooted float	ing Free floating	
AGOANO VE	SEIAIION	Floating	_	Attached alga	_		
		Information	listed on this form re	presents the c	lata collected in 2015. The str	ream was revisited	
		on 10/27/20	J19. The presence of	a stream char	nnel and OHWM was confirm	ed.	

	Information listed on this form represents the data collected in 2015. The stream was revisited on 10/27/2019. The presence of a stream channel and OHWM was confirmed.
MACROINVERTEBRATES OR OTHER WILDLIFE	
OBSERVED/OTHER OBSERVATIONS AND NOTES	



Photograph Direction South

Date: 09/12/2015

Comments: 2015 stream identification.



Photograph Direction North

Date: <u>10/27/2019</u>

STREAM ID S-Z7	STREAM NAME UNT to Little Stony Creek
LAT 37.343714 LONG -80.625914	DATE 07/11/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SET, SJT, DM	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW NRPW

Perenniai _	Intermitte	nt <u> Ephem</u>	eral TNW —	RPW —	NRPW	
		Estimate Measurements Top of Bank Width: 3.0 ft			Stream Erosion None ✓ Moderate	Незуу
					NoneNoderate	rieavy
		Top of Ban	· ·		Artificial, Modified or Char	nnelized
			ft RB <u>3.0</u>	<u>tt</u>	Yes _ <u>✓</u> No	
CHANNEL FE	ATURES	·	th: 0.50 in		Dam PresentYes _	✓ No
		Water Widt	th: 0.0 ft			_
		High Water	r Mark: <u>2.0 ft</u>		Sinuosity Low	Medium High
		Flow Direct	tion: S		Gradient	
					Flat Moderate (2 ft/100 ft)	
		Water Pres	nont .		Proportion of Reach Repre	,
			r, stream bed dry		Morphology Types	esented by Stream
		Stream			Riffle % Run	%
FLOW		Standin	•		Pool %	
CHARACTER	ISTICS	Flowing	water		Turbidity	
		Velocity			ClearSlightly	
			Moderate		OpaqueStained	
		Slow			Other	
INOR		STRATE CO add up to 10	MPONENTS 0%)	_	RGANIC SUBSTRATE COM does not necessarily add u	
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Dotrituo	sticks, wood, coarse	
Boulder	> 256 ı	mm (10")	60	Detritus	plant materials (CPOM)	25
Cobble	64-256 m	m (2.5"-10")	10	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	15	WIGGK-WIGG	(FPOM)	
Sand	0.06-2n	nm (gritty)	15			
Silt	0.004-0	0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004 r	mm (slick)				
			ant Surrounding Lan		Indicate the dominant type ✓ Trees Shrub	
		<u>✓</u> Forest Field/P	Commer asture Industrial		✓ Trees Shrub Grasses Herba	
		Agricul		ial	_	
WATERSHED FEATURES		Other:			Floodplain Width Wide > 30ft Mode	rate 15-30ft
LATORES		Conony C			✓ Narrow <16ft	rate 15-50it
		Canopy CoverPartly openPartly sha		aded	_	
		✓ Shaded Open			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	ne dominant type and	d record the d	dominant species present	
AQUATIC VE	GETATION			Rooted subme		tingFree floating
		Floatin	g algae	Attached algae	e	
MACROINVER OR OTHER	RTEBRATES					
WILDLIFE OBSERVED/C	THER					
OBSERVATIO						
NOTES						
		1				



Photograph Direction North

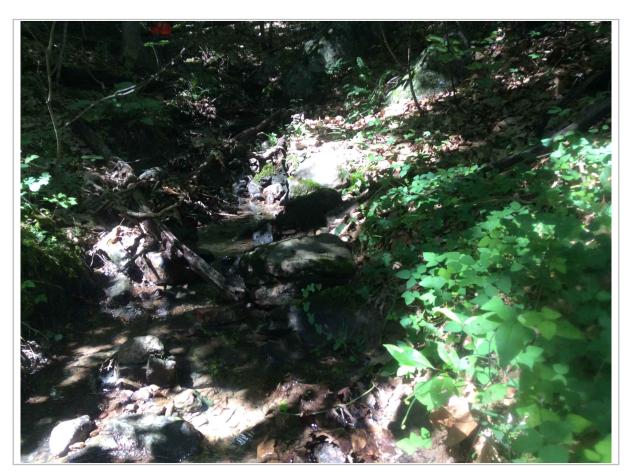
STREAM ID S-Z7-Braid-1			STREAM NA	STREAM NAME UNT to Little Stony Creek			
CLIENT MVP			PROJECT NAME MVP				
LAT 37.344251 LONG -80.626083					COU	NTY Giles	
INVESTIGATORS J.Hart, A. Larson, T. Woods			Woods				
WATER TYPE TNW RPW NRPW			FLOW REG Perennial	IME Intermi	ttent	Ephemeral	
		Estimate Mea	asurements	I	Sinuosity	✓ Low	Medium High
Top of Bank Width: _ Top of Bank Height:		Width: 3.0 ft Height:	ft	Gradient (0.	Flat	oderate Severe (100 ft) (10 ft/100 ft)	
		LB <u>0.5</u> f		11	Stream Ero None		Heavy
		Water Depth:			_	Modified or Chan	_
CHANNEL FE	ATURES	Water Width:			Yes		
			n Water Mark (Width):			udside Ditch	
		, ,	n Water Mark (Height)): <u>3.0</u> in	Yes Yes)
		Flow Direction	n: South	-		esentYes _	
							
						erial:	
		Motor Dec	-4		Culvert Size		souted by Other and
51 OW		Water Preser ✓ No water, s Stream bed Standing v	stream bed dry d moist				sented by Stream er if water present) %
FLOW CHARACTER	ISTICS	Flowing wa	ater		Turbidity ClearSlightly turbidTurbid Other		
	-	Volceit					
		Velocity Fast	_ Moderate				
ĺ		Slow	_				
INOR	_	UBSTRATE CO				UBSTRATE COM ecessarily add u	p to 100%)
Substrate Type	(shou	UBSTRATE CO			(does not n		p to 100%)
Substrate Type Bedrock	(should Dia	UBSTRATE CO Id add up to 10	0%) 100 % Composition in	Substrate	e Chara	ecessarily add u acteristic s, wood, coarse	p to 100%) % Composition in
Substrate Type Bedrock Boulder	(shoul	UBSTRATE CO Id add up to 10 meter	0%) 100 % Composition in Sampling Reach	Substrate Type	e Chara	ecessarily add u	p to 100%) % Composition in
Substrate Type Bedrock Boulder Cobble	Dia > 28 64-256	UBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10")	9%) 100 % Composition in Sampling Reach 25 10	Substrate Type	e Chara	ecessarily add u acteristic s, wood, coarse naterials (CPOM) very fine organic	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel	Dia	DBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5")	9%) 100 % Composition in Sampling Reach 25 10 15	Substrate Type Detritus	e Chara	ecessarily add u acteristic s, wood, coarse naterials (CPOM)	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand	Should Dia	UBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty)	% Composition in Sampling Reach 25 10 15	Substrate Type Detritus Muck-Muck	c Chara sticks plant m black,	ecessarily add u acteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM)	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shoul Dia	DUBSTRATE CO Id add up to 10 meter 56 mm (10") 6 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm	% Composition in Sampling Reach 25 10 15 10 20	Substrate Type Detritus	c Chara sticks plant m black,	ecessarily add u acteristic s, wood, coarse naterials (CPOM) very fine organic	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand	Shoul Dia	DUBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick)	9%) 100 % Composition in Sampling Reach 25 10 15 10 20 20	Substrate Type Detritus Muck-Muck Marl	e Chara sticks plant m black, grey,	ecessarily add u acteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt	Shoul Dia	DBSTRATE CO Id add up to 10 meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 104 mm (slick) Predominant Forest Field/Past Agricultura ROW	% Composition in Sampling Reach 25 10 15 10 20 20 t Surrounding Landouter Lindustrial Residential Other:	Substrate Type Detritus Muck-Muck Marl	c Chara sticks plant m black,	ecessarily add u acteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments Width 30ft Modera	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay	Shoul Dia	meter 56 mm (10") mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 14 mm (slick) Predominant Forest Field/Past Agricultura	% Composition in Sampling Reach 25 10 15 10 20 20 t Surrounding Landouter Lindustrial Residential Other:	Substrate Type Detritus Muck-Muck Marl use	e Chara sticks plant n black, grey, Floodplain Wide >	ecessarily add u acteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments Width 30ft Modera	p to 100%) % Composition in Sampling Area
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dia	DBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick) Predominant Field/Past Agricultura ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 25 10 15 10 20 20 t Surrounding Landu — Commercia Industrial al — Residentia — Other: er Partly shad	Substrate Type Detritus Muck-Muck Marl use	closes not not be closed sticks plant in black, grey, Floodplain Wide > V Narrow	ecessarily add upacteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments Width 30ft Modera	p to 100%) % Composition in Sampling Area 25 ate 15-30ft
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	Shoul Dia	DBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") mm (0.1"-2.5") -2mm (gritty) 04-0.06 mm 04 mm (slick) Predominant Field/Past Agricultura ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 25 10 15 10 20 20 t Surrounding Landu — Commercia Industrial — Residential — Other:	Substrate Type Detritus Muck-Muck Marl use	closes not not be closed sticks plant in black, grey, Floodplain Wide > V Narrow	ecessarily add upacteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments Width 30ft Modera	p to 100%) % Composition in Sampling Area 25 ate 15-30ft
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	(should be	DBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") 7 mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 15 mm (slick) Predominant Field/Past Agricultura ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 25 10 15 10 20 20 t Surrounding Landu — Commercia Industrial al — Residentia — Other: er Partly shad	Substrate Type Detritus Muck-Muck Marl Jase al	closes not not be closed sticks plant in black, grey, Floodplain Wide > V Narrow	ecessarily add upacteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments Width 30ft Modera	p to 100%) % Composition in Sampling Area 25 ate 15-30ft
Substrate Type Bedrock Boulder Cobble Gravel Sand Silt Clay WATERSHED FEATURES	(should be	DBSTRATE CO Id add up to 10 meter 56 mm (10") 5 mm (2.5"-10") 7 mm (0.1"-2.5") -2mm (gritty) 14-0.06 mm 15 mm (slick) Predominant Field/Past Agricultura ROW Canopy Cove Open Shaded	% Composition in Sampling Reach 25 10 15 10 20 20 t Surrounding Landu — Commercia Landu — Residentia — Other: er — Partly shade — Partly shade — Composition — Compositi	Substrate Type Detritus Muck-Muck Marl Jase al	closes not not be closed sticks plant in black, grey, Floodplain Wide > V Narrow	ecessarily add upacteristic s, wood, coarse naterials (CPOM) very fine organic (FPOM) shell fragments Width 30ft Modera	p to 100%) % Composition in Sampling Area 25 ate 15-30ft



Photograph Direction North

STREAM ID S-Z9	STREAM NAME UNT to Little Stony Creek
LAT 37.343829 LONG -80.628367	DATE 07/11/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SET, SJT, DM	
FLOW REGIME Perennial — Intermittent Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

Perennial -	Intermitte	nt <u> Ephem</u>	eral TNW	RPW –	NRPW	
		F-41. 4 -			Otas	
		Estimate Measurements Top of Bank Width: 4.0 ft			Stream ErosionNone ✓ Moderate	Heavv
		Top of Bank Height:				-
		•	к неідпі. ft		Artificial, Modified or Char	nnelized
			th: 3.00 in	<u> </u>	Yes No	
CHANNEL FE	ATURES	·			Dam PresentYes _	<u>∕</u> No
			h: 2.0 ft		Sinuosity Low _	Medium High
		Ū	Mark: <u>1.5 ft</u>		onidosity Low	Mediditi riigit
		Flow Direct	tion: S		Gradient Flat <u>✓</u> Moderate	Savora
						(10 ft/100 ft)
		Water Pres			Proportion of Reach Repre	esented by Stream
		No wate Stream I	r, stream bed dry		Morphology Types Riffle 40 % Run 25	%
		Standing			Pool 35 %	70
FLOW CHARACTER	ISTICS	<u>✓</u> Flowing	•			
		Velocity			Turbidity ✓ ClearSlightly	turbidTurbid
		•	Moderate		OpaqueStained	
		✓ Slow			Other	
INOR			MPONENTS	_	RGANIC SUBSTRATE COM	
Cubatasta	(should a	add up to 10		•	does not necessarily add u	· · · · · · · · · · · · · · · · · · ·
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	0.5
Boulder		mm (10")	30		plant materials (CPOM)	25
Crovel		m (2.5"-10")	20	Muck-Mud	black, very fine organic (FPOM)	
Gravel Sand		nm (gritty)	35		(i i oiii)	
Silt		0.06 mm	10 5	Marl	grey, shell fragments	
Clay		mm (slick)	5	Wall	groy, enon magmonto	
,		` ′	ant Surrounding Lan	duse	Indicate the dominant type	(Check one)
		<u>✓</u> Forest	Commer	cial	<u>✓</u> Trees Shrub	s
			astureIndustrial		Grasses Herba	iceous
WATERSHED		Other:	Agricultural Residential		Floodplain Width	
FEATURES					Wide > 30ft Mode ✓ Narrow <16ft	rate 15-30ft
		Canopy CoverPartly openPartly shad		aded	<u>• Ivanow viole</u>	
		Partly openPartly shadedOpen			Wetland PresentYes Wetland ID	<u>✓</u> No
		Indicate th	e dominant type and	d record the d	lominant species present	
AQUATIC VE	GETATION	Rooted	emergent	Rooted subme		tingFree floating
		Floating	g algae	Attached algae	e	
MACDOIN	TEDD ATES					
MACROINVER OR OTHER	KIEBKAIES					
WILDLIFE OBSERVED/C	THER					
OBSERVATION NOTES						



Photograph Direction North

STREAM ID S-Z10	STREAM NAME UNT to Little Stony Creek
LAT 37.342534 LONG -80.620812	DATE 07/12/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SET, SJT, DM	
FLOW REGIME Perennial — Intermittent ✓ Ephemeral —	WATER TYPE TNW RPW ✓ NRPW

				Stream Erosion	Stream Erosion	
		Top of Bank Width: 12.0 ft		<u>✓</u> None Moderate Heavy		
		Top of Bank Height:		Artificial, Modified or Char	nnelized	
			ft RB <u>1.0</u>	<u>ft</u>	Yes _ No	menzea
CHANNEL FE	ATUDES	Water Dept	h: 1.00 in			
CHANNEL FE	ATURES	Water Width: 10.0 ft		Dam PresentYes	<u>∠</u> No	
				Sinuosity <u>v</u> Low	Medium High	
		-				_ 3
		Flow Direct	ion: <u>3</u>	_	Gradient ✓ FlatModerate	Severe
					(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)
		Water Pres	sent		Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types	-
			ped moist		Riffle 40 % Run 20 Pool 40 %	%
FLOW		Standing	•		Pool 40 %	
CHARACTER	ISTICS	<u>v</u> i lowing	water		Turbidity	
		Velocity			<u>✓</u> ClearSlightly	
			Moderate		OpaqueStainedOther	
		<u>✓</u> Slow				
INOR		BSTRATE COMPONENTS add up to 100%)		_	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)	
Substrate Type	Diame	Diameter %		Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Dotritus	sticks, wood, coarse	
Boulder	> 256	mm (10")	25	Detritus	plant materials (CPOM)	40
Cobble	64-256 mm (2.5"-10")		10	Muck-Mud	black, very fine organic	
Gravel	2-64 mm	(0.1"-2.5")	30	iviuck-iviuu	(FPOM)	
Sand	0.06-2n	nm (gritty)	20			
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments	
Clay	< 0.004 ı	mm (slick)	5			
		Predominant Surrounding Landuse			Indicate the dominant type	
		<u>✓</u> Forest	Commer	_		
		Field/PastureIndustrial Agricultural Resident				
WATERSHED		Other:			Floodplain Width	
FEATURES		_			Wide > 30ft Mode ✓ Narrow <16ft	rate 15-30ft
		Canopy Cover				
		Partly openPartly shadedOpen		aueu	Wetland PresentYes Wetland ID	<u>✓</u> No
AQUATIC VEGETATION		Indicate th	e dominant type and	d record the d	dominant species present	
			· —	Rooted subme	_	tingFree floating
		Floating	Floating algaeAttached algae			
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES				e USACE in 2	017. The presence of a stream	am channel and
			s confirmed.			



Photograph Direction South

STREAM ID S-Z11	STREAM NAME UNT to Little Stony Creek
LAT 37.342232 LONG -80.620583	DATE 07/12/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SET, SJT, DM	
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW

			leasurements		Stream Erosion		
		Top of Bank Width: 5.0 ft		<u>✓</u> NoneModerateHeavy			
		Top of Bank Height:		Artificial, Modified or Channelized			
		LB <u>1.0</u>	ft RB <u>0.5</u>	<u>ft</u>	Yes _ <u>✓</u> No		
CHANNEL FE	ATURES	Water Dept	h: 2.00 in				
CHANNELTE	ATORES	Water Width: 3.0 ft		Dam PresentYes	<u>∕</u> No		
				Sinuosity v Low	Medium High		
		Floor Birestine S					
		Flow Direct			Gradient ✓ Flat Moderate _	Severe	
					(0.5/100 ft (2 ft/100 ft)	(10 ft/100 ft)	
		Water Pres			Proportion of Reach Represented by Stream		
			r, stream bed dry		Morphology Types Riffle % Run 10	0 %	
		Stream to Standing	ped moist		Riffle % Run 10 Pool %	U %	
FLOW	ICTICC	Standing	•		70		
CHARACTER	151165	<u></u>			Turbidity		
		Velocity			✓ Clear — Slightly — Opaque — Stained		
		Fast . ✓ Slow	Moderate		Other		
INOR			MONENTO			4DONENTO	
INUR		BSTRATE COMPONENTS add up to 100%)		_	ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock			- carriprinty recent	, , , ,	sticks, wood, coarse	- company of	
Boulder	> 256	mm (10")		Detritus	plant materials (CPOM)	5	
Cobble	64-256 m	m (2.5"-10")		Muck-Mud	black, very fine organic	0.5	
Gravel	2-64 mm	1 (0.1"-2.5")	25	IVIUCK-IVIUU	(FPOM)	25	
Sand	0.06-2n	nm (gritty)	50				
Silt	0.004-0	0.06 mm	25	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)					
		Predominant Surrounding Landuse			Indicate the dominant type		
		✓ ForestCommercialIndustrialAgricultural Resident		-			
					al		
WATERSHED FEATURES		Other:			Floodplain Width ✓ Wide > 30ft Moderate 15-30ft		
FEATURES		_		Narrow <16ft		rate 15-301t	
		Canopy Co					
		✓ Shaded Open		auou	Wetland Present <u>v</u> Yes Wetland ID w-z3	No	
		Indicate th	e dominant type and	d record the d	dominant species present		
AQUATIC VEGETATION		✓ Rooted emergentRooted submergentRooted floatingFree floating					
		Floating	Floating algaeAttached algae				
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES		Spring fed, perennial, adjacent to wetland - 2015 comments					
		Stream was extended on 8/2/2016. The presence of a stream channel and OHWM was					
		confirmed.					
Ī		1					



Photograph Direction SW

STREAM ID S-Z12-EPH	STREAM NAME UNT to Little Stony Creek			
LAT 37.342271 LONG -80.620283	DATE 07/07/2017			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS HBS				
FLOW REGIME Perennial — Intermittent Ephemeral	WATER TYPE TNW — RPW — NRPW ✓			

Perennial _	Intermitte	nt Ephem	eral 🗹 TNW	RPW —	NRPW 🖍	
CHANNEL FEATURES		Top of Ban Top of Ban LB 4.0 Water Dep Water Widt High Water Flow Direc Water Pres No water	ft RB 2.0 th: 0.50 in th: 0.0 ft Mark: 3.0 ft tion: S sent r, stream bed dry	_	(0.5/100 ft (2 ft/100 ft) Proportion of Reach Representation Morphology Types	No Medium High Severe (10 ft/100 ft) esented by Stream
FLOW CHARACTERISTICS		Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Riffle 60 % Run 30 Pool 10 % Turbidity Clear Slightly Opaque Stained Other	turbidTurbid
		STRATE COMPONENTS add up to 100%)		_	RGANIC SUBSTRATE CON does not necessarily add u	
Substrate Type	Diameter		% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder	> 256 mm (10")		20		plant materials (CPOM)	70
Cobble	64-256 mm (2.5"-10")		20	Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")		30		(I FOIVI)	
Sand Silt		nm (gritty) 0.06 mm	20	Marl	grey, shell fragments	
Clay		mm (slick)	10	IVIAII	grey, shell fragments	
WATERSHED FEATURES Ca			ntural Resident Diver Dippen Partly sh	rcial I tial	Indicate the dominant type Trees Shrub Grasses Herba Floodplain Width Wide > 30ft Mode Narrow <16ft Wetland Present Yes Wetland ID	rate 15-30ft
AQUATIC VEGETATION		Rooted	l emergent	d record the d Rooted subme Attached algae	_	tingFree floating
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES						



Photograph Direction North

STREAM ID S-Z13	STREAM NAME Little Stony Creek			
LAT 37.34232 LONG -80.61997	DATE 07/12/2015			
CLIENT MVP	PROJECT NAME MVP			
INVESTIGATORS SET, SJT, DM				
FLOW REGIME Perennial Intermittent Ephemeral	WATER TYPE TNW RPW ✓ NRPW			

Perennial _	<u> Intermitte</u>	nt <u> </u>	eral TNW	RPW –	NRPW	
		F - 41 4 - 8			O4	
		Estimate Measurements Top of Bank Width: 25.0 ft		Stream ErosionNoneModerateHeavy		
		Top of Bank Height:				
		LB 10.0	ŭ		Artificial, Modified or Channelized	
			th: 12.00 in	<u></u>	Yes <u></u> ✓ No	
CHANNEL FE	ATURES	·			Dam PresentYes _	<u>√</u> No
			th: 18.0 ft		Sinuosity V Low	Medium High
		J	Mark: <u>2.0 ft</u>		Silidosity V Low	Medium riigii
		Flow Direc	tion: S		Gradient ✓ FlatModerate	Sovere
					<u>✓</u> FlatModerateSevere (0.5/100 ft (2 ft/100 ft) (10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	esented by Stream
			r, stream bed dry		Morphology Types Riffle 75 % Run 20 %	
		Stream Standin			Pool 5 %	70
FLOW CHARACTER	ISTICS	Flowing	•		· ·	
	.01100				Turbidity ✓ ClearSlightly	turbidTurbid
		Velocity <u>✓</u> Fast	Moderate		OpaqueStained	
		Slow			Other	
INOR	GANIC SUB	STRATE CO	MPONENTS	O	RGANIC SUBSTRATE COM	// IPONENTS
	(should a	add up to 10	,	,	loes not necessarily add u	<u>, , , , , , , , , , , , , , , , , , , </u>
Substrate Type	Diame	ter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	sticks, wood, coarse	
Boulder		mm (10")	25	2011.100	plant materials (CPOM)	5
Cobble		m (2.5"-10")	25	Muck-Mud	black, very fine organic	
Gravel		(0.1"-2.5")	20		(FPOM)	
Sand		nm (gritty)	20	NAI	anav ahall franssanta	
Silt Clay		0.06 mm mm (slick)	10	Marl	grey, shell fragments	
Clay	V 0.004 I	. ,	nt Surrounding Lar	ndusa	Indicate the dominant type	(Chack and)
		Predominant Surrounding Land ✓ Forest Commerce			✓ Trees Shrub	
		Field/Pasture Industrial			Grasses Herba	iceous
WATERSHED		Agricultural Residential		tial	Floodplain Width	
FEATURES		Other: Canopy Cover		✓ Wide > 30ft Moderate 15-		rate 15-30ft
					Narrow <16ft	
		<u>✔</u> Partly o			Wetland PresentYes	<u>✓</u> No
		— Welland ID				
AQUATIC VEGETATION		Indicate the dominant type and record the dominant species present Rooted emergent Rooted floating Free floating				
		Rooted emergentRooted submergentRooted floatingFree floating Floating algae Attached algae				
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES		Stream was	s revisited and extend	ded on 8/1/201	6. The presence of a stream	channel and OHWM
		was confirm	ned.			
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Photograph Direction South

Date: <u>07/12/2015</u>

Comments: 2015 stream identification.



Photograph Direction East

Date: <u>08/01/2016</u>

Comments: 2016 stream extension

STREAM ID S-Z14	STREAM NAME UNT to Little Stony Creek
LAT 37.341443 LONG -80.618219	DATE 07/13/2015
CLIENT MVP	PROJECT NAME MVP
INVESTIGATORS SET, SJT, DM	
FLOW REGIME	WATER TYPE TNW PDW NDDW
INVESTIGATORS SET, SJT, DM	WATER TYPE

Perenniai	memme	nt <u> </u>	erai INVV —	RPW —	NRPW —		
		F-4'4- B			04		
		Estimate Measurements Top of Bank Width: 4.0 ft			Stream Erosion None Moderate Heavy		
					VINOREINDUCTATE	ricavy	
		Top of Bank Height:		_	Artificial, Modified or Channelized		
		LB <u>0.5 ft</u> RB <u>0.5 ft</u>		<u>ft</u>	Yes _ <u>✔</u> No		
CHANNEL FE	ATURES	Water Dep	th: 3.00 in		Dam PresentYes _	4 No	
		Water Widt	th: 2.0 ft		res _	Z NO	
		High Water	Mark: 0.5 ft		Sinuosity 🔽 Low	Medium High	
		Flow Direct	tion: Northwest		Gradient		
		200				✓ Severe	
						(10 ft/100 ft)	
		Water Pres			Proportion of Reach Repre	esented by Stream	
			r, stream bed dry		Morphology Types Riffle 70 % Run 0 %		
		Stream Standin	bed moist		Pool 30 %	70	
FLOW	ICTICS	Flowing	-		70 70		
CHARACTER	131103				Turbidity		
		Velocity			✓ ClearSlightly	turbidTurbid	
		Fast Slow	<u>✓</u> Moderate		OpaqueStainedOther		
		_		_			
INOR		BSTRATE COMPONENTS add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter		% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area	
Bedrock					sticks, wood, coarse		
Boulder	> 256	mm (10")		Detritus	plant materials (CPOM)	10	
Cobble	64-256 m	m (2.5"-10")	15	Muck-Mud	black, very fine organic		
Gravel	2-64 mm	n (0.1"-2.5")	50	WIUCK-WIUU	(FPOM)		
Sand	0.06-2n	nm (gritty)	25				
Silt	0.004-0	0.06 mm	10	Marl	grey, shell fragments		
Clay	< 0.004	mm (slick)					
		Predominant Surrounding Land			Indicate the dominant type		
		<u>✓</u> Forest Commer			✓ Trees Shrub		
		— Field/P			Grasses Herba	ceous	
WATERSHED		Agricultural Residentia Other: Canopy Cover Partly open Partly share		liai	Floodplain Width		
FEATURES						rate 15-30ft	
				✓ Narrow <16ft			
				aded	Wetland PresentYes	✓ No	
		✓ Shaded Open Wetland ID					
					Iominant species present		
AQUATIC VEGETATION				Rooted subme Attached algae	<u> </u>	tingFree floating	
		FIOAIIII	y alyae	Allacrieu algai			
		1					
MACROINVERTEBRATES OR OTHER WILDLIFE OBSERVED/OTHER OBSERVATIONS AND NOTES							
		'					
		i					



Photograph Direction $\underline{\mathsf{NW}}$